

## ABSTRACT OF THE INVENTION

1  
2           A system is provided for unloading accumulated liquids and enhancing  
3 the recovery of gas from a reservoir having diminished pressure. An annulus  
4 between a tubing string and casing is isolated by a packer and continually  
5 pressurized with a slipstream of compressed gas while the well continues to  
6 produce. A unique valve positioned in the tubing string is shuttled between a  
7 production position in which production fluids are permitted to bypass the valve to  
8 the surface and a lift position in which the bypass is blocked and an unloading port  
9 is opened to vent high pressure annulus gas to the tubing string above the valve,  
10 lifting accumulated liquids with it. Preferably, the valve is actuated to the lift position  
11 by the impact of a plunger dropped from a lubricator at the wellhead, when the  
12 pressure in the annulus has reached a predetermined threshold. When the gas has  
13 been vented and the pressure in the annulus drops, the valve is actuated to the  
14 uphole production position as a result of the higher reservoir pressure.